

## EAST Search History

| Ref # | Hits | Search Query  | DBs                | Default Operator | Plurals | Time Stamp          |
|-------|------|---|--------------------|------------------|---------|---------------------|
| S1    | 6    | liquid phase microextraction  | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>12:28 |
| S2    | 1    | "20040171169"   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>16:44 |
| S3    | 1    | "5169634".pn.   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/10/22<br>10:31 |
| S4    | 2    | pedersen-bjergaard stig.in.   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/17<br>07:25 |
| S5    | 29   | liquid NEAR5<br>microextraction   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:02 |
| S6    | 11   | S5 AND membrane   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:03 |
| S7    | 48   | liquid NEAR10<br>microextraction  | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:10 |
| S8    | 22   | S7 AND membrane   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:03 |
| S9    | 347  | liquid AND microextraction  | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:10 |
| S10   | 159  | S9 AND membrane   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:10 |
| S11   | 11   | S10 AND (fatty acid ester<br>OR vegetable oil OR silicone<br>oil OR nitroaryalkylether) | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:24 |
| S12   | 1    | "4844067".pn.   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:24 |
| S13   | 248  | liquid phase microextraction<br>OR liquid phase extraction                              | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:59 |
| S14   | 84   | S13 AND membrane  | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:59 |
| S15   | 36   | S14 AND oil   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>14:59 |
| S16   | 4    | S14 AND soya oil  | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>15:00 |
| S17   | 561  | membrane AND soya oil   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>15:00 |
| S18   | 13   | membrane SAME soya oil  | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>15:03 |
| S19   | 271  | membrane SAME (soya oil<br>OR olive oil OR tea tree oil)                                | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>15:37 |
| S20   | 1    | membrane SAME<br>nitroaryalkylether   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/05/01<br>15:38 |

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|-----|-----|--|-----------------|-----|----|------------------|
| S21 | 0   | membrane SAME nitroarylalkyl ADJ ether   | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 15:38 |
| S22 | 737 | membrane SAME nitro AND ether  | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 15:39 |
| S23 | 19  | membrane SAME (nitro NEAR5 ether)  | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 15:40 |
| S24 | 1   | "20020040154"  | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 15:40 |
| S25 | 1   | "3612283".pn.  | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 16:30 |
| S26 | 10  | acceptor solution AND membrane AND analyte   | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 16:47 |
| S27 | 1   | "4837157".pn.  | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:07 |
| S28 | 184 | vegetable oil WITH membrane  | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:08 |
| S29 | 21  | S28 AND hollow fiber   | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:43 |
| S30 | 185 | porous polymeric substrate   | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:21 |
| S31 | 27  | S30 AND (fatty acid ester OR vegetable oil OR silicone oil OR nitro arylalkylether)  | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:24 |
| S32 | 22  | S31 AND membrane   | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:24 |
| S33 | 17  | porous polymeric substrate AND (fatty acid ester OR vegetable oil OR silicone oil OR nitroarylalkylether) AND membrane AND hollow fiber  | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:45 |
| S34 | 1   | porous polymeric substrate SAME (fatty acid ester OR vegetable oil OR silicone oil OR nitroarylalkylether) AND membrane AND hollow fiber | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:46 |
| S35 | 6   | porous polymeric substrate SAME (fatty acid ester OR vegetable oil OR silicone oil OR nitroarylalkylether)                               | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:50 |
| S36 | 27  | porous polymeric substrate AND (fatty acid ester OR vegetable oil OR silicone oil OR nitroarylalkylether)                                | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:53 |
| S37 | 0   | S27 AND hollow fiber   | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:51 |
| S38 | 52  | porous polymeric substrate SAME hollow fiber SAME membrane   | US-PGPUB; USPAT | ADJ | ON | 2007/05/01 17:53 |

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|-----|------|--|--------------------|-----|----|---------------------|
| S39 | 17   | S38 AND (fatty acid ester OR vegetable oil OR silicone oil OR nitroarylalkylether) | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/01<br>18:00 |
| S40 | 8    | surface modified porous membrane and process                                       | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:15 |
| S41 | 8    | surface modified porous membrane and process                                       | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:15 |
| S42 | 7    | S41 AND hollow fiber   | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:19 |
| S43 | 687  | membrane AND hollow fiber AND acceptor   | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:20 |
| S44 | 74   | porous polymeric substrate AND hollow fiber AND membrane                           | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:24 |
| S45 | 12   | S44 AND acceptor   | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:21 |
| S46 | 1    | porous polymeric substrate AND (hollow fiber WITH acceptor) AND membrane           | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:24 |
| S47 | 8    | (hollow fiber WITH acceptor) AND membrane  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:35 |
| S48 | 17   | (hollow fiber SAME acceptor) AND membrane  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:52 |
| S49 | 1    | "5418006".pn.  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:58 |
| S50 | 12   | porous polymeric substrate AND fatty acid ester AND membrane                       | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/02<br>09:59 |
| S51 | 0    | "4199765".pn"  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/07<br>16:41 |
| S52 | 1    | "4199765".pn.  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/07<br>16:41 |
| S53 | 1    | "7148060".pn.  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/07<br>16:41 |
| S54 | 1    | "4859535".pn.  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/07<br>16:41 |
| S55 | 1    | "4394372".pn.  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/07<br>16:42 |
| S56 | 1    | "5914038".pn.  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/07<br>16:42 |
| S57 | 1    | "6112908".pn.  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/07<br>16:47 |
| S58 | 3181 | analyte And membrane AND acceptor  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/07<br>16:47 |
| S59 | 40   | S58 AND stir And hollow fiber  | US-PGPUB;<br>USPAT | ADJ | ON | 2007/05/07<br>16:48 |

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|-----|-----|---|--------------------|-----|-----|---------------------|
| S60 | 4   | S59 AND polyolefin  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/07<br>16:50 |
| S61 | 1   | "20040171169".pn.   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/07<br>16:51 |
| S62 | 4   | micro ADJ extraction AND<br>membrane AND carrier<br>NEAR3 layer   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/08<br>08:06 |
| S63 | 4   | micro NEAR2 extraction<br>AND membrane AND carrier<br>NEAR3 layer   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/08<br>08:06 |
| S64 | 82  | micro NEAR2 extraction<br>AND membrane AND carrier  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/08<br>08:10 |
| S65 | 2   | micro NEAR2 extraction<br>AND membrane AND carrier<br>AND TOPO  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/08<br>08:18 |
| S66 | 1   | "6354443".pn.   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/08<br>10:15 |
| S67 | 40  | analyte AND membrane<br>AND acceptor AND stir AND<br>hollow fiber   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/08<br>10:19 |
| S68 | 0   | "schafer.in" AND "5861097".<br>pn.  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/08<br>10:19 |
| S69 | 1   | "5861097".pn.   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/08<br>10:19 |
| S70 | 34  | hollow fiber and<br>microextraction   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/17<br>07:48 |
| S71 | 2   | hollow fiber and membrane<br>and (soya oil or tree tea oil)   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/17<br>07:49 |
| S72 | 309 | membrane and (soya oil or<br>tree tea oil) and (coating or<br>film)   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/17<br>07:49 |
| S73 | 47  | membrane and (soya oil or<br>tree tea oil) same(coating<br>or film)   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/05/17<br>12:10 |
| S74 | 1   | ("20040116829").PN.   | US-PGPUB;<br>USPAT | OR  | OFF | 2007/05/17<br>12:10 |
| S75 | 7   | ((("5229004") or<br>("5252220") or ("5512180")<br>or ("5603953") or<br>("9868935") or ("6096217")<br>or ("6162360") or<br>("6171563"))).PN. | US-PGPUB;<br>USPAT | OR  | OFF | 2007/09/26<br>16:16 |
| S76 | 1   | ("5650323").PN.   | US-PGPUB;<br>USPAT | OR  | OFF | 2007/09/26<br>16:13 |
| S77 | 13  | manns.in. and hollow fiber  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/09/26<br>17:24 |

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|-----|-------|---|------------------------------|-----|-----|---------------------|
| S78 | 150   | liquid membrane with (fatty acid ester or vegetable oil or silicone oil or mixture) | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/09/26<br>17:28 |
| S79 | 67    | S78 and hollow adj fiber  | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/09/26<br>17:24 |
| S80 | 61    | S79 and @py<="2004" and @ay<="2004"   | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/09/26<br>17:25 |
| S81 | 11    | liquid membrane with (fatty acid ester or vegetable oil or silicone oil)            | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/09/26<br>17:28 |
| S82 | 6     | ("2358320"   "3993746"   "4390260"   "4413014"   "4861586").PN.                     | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/09/27<br>12:38 |
| S83 | 1     | ("5507949").PN.   | US-PGPUB;<br>USPAT           | OR  | OFF | 2007/10/11<br>09:12 |
| S84 | 91036 | "210".clas.   | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>09:12 |
| S85 | 3303  | S84 and liquid near3 membrane   | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>09:12 |
| S86 | 40    | S85 and fatty acid ester  | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>09:12 |
| S87 | 32    | S86 and @py<="2004" and @ay<="2004"   | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:01 |
| S88 | 25    | S85 and (olive or tree or soya) near3 oil   | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:01 |
| S89 | 22    | S88 and @py<="2004" and @ay<="2004"   | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:03 |
| S90 | 0     | S89 and (liquid same phase same microextraction)                                    | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:04 |
| S91 | 0     | S89 and (liquid same microextraction)   | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:04 |
| S92 | 10    | S89 and (extraction)  | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:04 |
| S93 | 15919 | (liquid near3 membrane)   | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:04 |
| S94 | 37    | S93 and membrane same oil same (olive or teatree or soya)                           | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:05 |
| S95 | 6     | S94 and extraction  | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:16 |
| S96 | 1     | ("4276179").PN.   | US-PGPUB;<br>USPAT           | OR  | OFF | 2007/10/11<br>10:40 |
| S97 | 0     | S96 and ionophore   | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:40 |
| S98 | 32    | ionophore   | US-PGPUB;<br>USPAT           | ADJ | ON  | 2007/10/11<br>10:41 |

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|------|-------|--|--------------------|-----|-----|---------------------|
| S99  | 0     | S98 and liquid membrane  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>10:41 |
| S100 | 6     | S98 and fiber  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:43 |
| S101 | 6     | ((("4666543") or<br>("5282964") or ("5474902")<br>or ("5846427") or<br>("5202023") or<br>("5252220"))).PN. | US-PGPUB;<br>USPAT | OR  | OFF | 2007/10/11<br>11:43 |
| S102 | 0     | S101 and perservative  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:44 |
| S103 | 15687 | hollow fiber   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:44 |
| S104 | 38    | S103 and microextraction   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:44 |
| S105 | 0     | S104 and perservative  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:44 |
| S106 | 15    | S104 and housing   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:46 |
| S107 | 2099  | liquid adj membrane  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:46 |
| S108 | 1     | S107 same preservative   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:48 |
| S109 | 110   | S107 and preservative  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:48 |
| S110 | 1     | S109 and microextraction   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:51 |
| S111 | 2099  | liquid adj membrane  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:51 |
| S112 | 488   | S111 and hollow fiber  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:51 |
| S113 | 130   | S112 and (store or stored)   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:51 |
| S114 | 70    | S113 and days  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:51 |
| S115 | 59    | S114 and @py<="2004"<br>and @ay<="2004"  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>11:52 |
| S116 | 7     | S115 and ((store or stored)<br>same days)  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>12:01 |
| S117 | 965   | hollow adj fiber and ((store<br>or stored) same days)  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>12:02 |
| S118 | 52    | S117 and analyte and<br>extract  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>12:02 |
| S119 | 26    | S118 and @py<="2004"<br>and @ay<="2004"  | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>12:06 |
| S120 | 15687 | hollow adj fiber   | US-PGPUB;<br>USPAT | ADJ | ON  | 2007/10/11<br>12:06 |

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|------|-----|--|-----------------|-----|-----|------------------|
| S121 | 149 | S120 same liquid adj membrane  | US-PGPUB; USPAT | ADJ | ON  | 2007/10/11 12:06 |
| S122 | 34  | S121 and (housing or closed near3 (container or compartment))  | US-PGPUB; USPAT | ADJ | ON  | 2007/10/11 12:07 |
| S123 | 24  | S122 and @py<="2004" and @ay<="2004"   | US-PGPUB; USPAT | ADJ | ON  | 2007/10/11 12:26 |
| S124 | 1   | liquid adj. membrane same preservative   | US-PGPUB; USPAT | ADJ | ON  | 2007/10/11 12:29 |
| S125 | 1   | ("0514686").PN.  | US-PGPUB; USPAT | OR  | OFF | 2007/10/11 12:29 |
| S126 | 1   | ("6291249").PN.  | US-PGPUB; USPAT | OR  | OFF | 2007/10/11 12:30 |
| S127 | 1   | ("5507949").PN.  | US-PGPUB; USPAT | OR  | OFF | 2007/10/22 10:32 |
| S128 | 1   | S127 and hollow  | US-PGPUB; USPAT | ADJ | ON  | 2007/10/22 10:32 |
| S129 | 1   | S127 and hollow fiber  | US-PGPUB; USPAT | ADJ | ON  | 2007/10/22 10:32 |
| S130 | 17  | liquid membrane same (fatty acid ester or vegetable oil)   | US-PGPUB; USPAT | ADJ | ON  | 2008/05/26 14:27 |
| S131 | 5   | (tributyrin or dodecyl acetate or dodecyl butyrate or myristyl acetate) same membrane and extraction | US-PGPUB; USPAT | ADJ | ON  | 2008/05/26 15:45 |
| S132 | 1   | ("5637224").PN.  | US-PGPUB; USPAT | OR  | OFF | 2008/05/26 15:54 |
| S133 | 1   | ("4309448").PN.  | US-PGPUB; USPAT | OR  | OFF | 2008/05/26 18:17 |
| S134 | 891 | (tributyrin or dodecyl acetate or dodecyl butyrate or myristyl acetate) and membrane                 | US-PGPUB; USPAT | ADJ | ON  | 2008/05/27 08:02 |
| S135 | 6   | (tributyrin or dodecyl acetate or dodecyl butyrate or myristyl acetate) with membrane                | US-PGPUB; USPAT | ADJ | ON  | 2008/05/27 08:02 |
| S136 | 916 | (acetate or propionate or butyrate) with ester with membrane   | US-PGPUB; USPAT | ADJ | ON  | 2008/05/27 08:06 |
| S137 | 0   | (acetate or propionate or butyrate) with ester with liquid membrane                                  | US-PGPUB; USPAT | ADJ | ON  | 2008/05/27 08:06 |
| S138 | 6   | (acetate or propionate or butyrate) with ester with liquid near3 membrane                            | US-PGPUB; USPAT | ADJ | ON  | 2008/05/27 08:06 |

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|------|-----|--|--------------------|-----|----|---------------------|
| S139 | 6   | (acetate or propionate or butyrate) with ester same liquid membrane                          | US-PGPUB;<br>USPAT | ADJ | ON | 2008/05/27<br>08:08 |
| S140 | 866 | (acetate or propionate or butyrate) and liquid membrane                                      | US-PGPUB;<br>USPAT | ADJ | ON | 2008/05/27<br>08:24 |
| S141 | 49  | (acetate or propionate or butyrate) same liquid membrane                                     | US-PGPUB;<br>USPAT | ADJ | ON | 2008/05/27<br>08:24 |
| S142 | 1   | (tributyrin or dodecyl acetate or dodecyl butyrate or myristyl acetate) same liquid membrane | US-PGPUB;<br>USPAT | ADJ | ON | 2008/05/27<br>08:24 |

5/27/2008 8:44:55 AM

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